IMMERSION TEST REPORT

FOR THE

AVIATION LANTERNS A704-5

PART NUMBER A704R-0005

MANUFACTURED BY

CARMANAH TECHNOLOGIES, INC. BUILDING 4 – 203 HARBOUR ROAD VICTORIA, B.C., CANADA V9A 3S2

PREPARED BY

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The results of the testing reported herein relate only to the actual items tested.

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Maintains Laboratory Accreditation to ISO/IEC 17025 and ISO 9001

APPROVAL SHEET

Environment Associates hereby certifies that the information presented in this report is, to the best of our knowledge, true and correct in all respects.

ENVIRONMENT ASSOCIATES, INC. Martin J. Povall Jr., Laboratory Manager

Date

Report Written by Gerald Flippen on March 31, 2006

<u>REVISION SHEET</u>

<u>REVISION LETTER</u> <u>DESCRIPTION OF REVISION</u> <u>DATE</u> <u>APPROVAL</u>

None

Original Issue

03/31/06

ADMINISTRATIVE DATA

PURPOSE OF TEST:	To demonstrate compliance to the applicable requirements of the specifications cited below.
ITEM SUBJECTED TO TEST:	Aviation Lanterns A704-5 Part Number A704R-0005
TEST SPECIFICATIONS:	A704-5 Test Plan
SUBMITTED BY:	Carmanah Technologies, Inc. Building 4-203 Harbour Road Victoria, B.C., Canada V9A 3S2
TESTING AGENCY:	Environment Associates, Inc. 2300 West Cape Cod Way Santa Ana, California 92703
DATES TESTING CONDUCTED:	February 27, 2006
AUTHORIZATION TO TEST:	Carmanah Technologies Purchase Order Number 240266

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SUMMARY OF TEST RESULTS

<u>TES</u>	<u>T</u>	SAMPLE NO.	SERIAL NO.	PASS/FAIL
2.0	Immersion	JC08250002		X
		JC08250012		Х
		JC08250035		Χ
		JC08250037		X

Note:

"Pass" in the column above indicates completion of the test.

GENERAL INFORMATION

1.0 GENERAL

1.1 TEST ITEM DESCRIPTION

Aviation Lanterns A704-5 Part Number A704R-0005 Serial Number JC08250002, JC082500012, JC08250035& JC08250037

1.2 <u>REFERENCE DOCUMENTS</u>

<u>Military</u>

MIL-STD-831

Preparation of Test Reports

Carmanah Technologies

Doc. No. 43912, Rev. A

A-704 Test Plan for Aviation Lanterns A704-5

1.3 TOLERANCES

Test Equipment

Test equipment utilized was calibrated to International Organization for Standards (ISO) 10012-1, "Quality Assurance Requirements for Measuring Equipment", Part 1: "Meteorological (sic) Confirmation System for Measuring Equipment"; American National Standards Institute (ANSI)/National conference of Standards Laboratories (NCSL) Z540-1, "General Requirements for Calibration Laboratories and Measuring and Test Equipment, latest revision and traceable to the National Institute for Standards and Technology.

Unless otherwise described in this report, the environmental test equipment was capable of controlling the test equipment within the following tolerances:

1.3 TOLERANCES (Continued)

Temperature at the control sensor:	±2.0 degrees C
Sensor response time:	<20 seconds
Time:	±5%

Laboratory Ambient Conditions

All laboratory ambient conditions was maintained as follows:

Temperature:	25 ±10 degrees C
Pressure:	30 ±2 inches Hg
Relative Humidity:	90% maximum

2.0 IMMERSION

2.1 <u>REFERENCE</u>

A704-5 Test Plan, Revision A, Paragraph 6.5

2.2 PROCEDURE

2.2.1

The Aviation Lanterns A704-5 listed below were subjected to two (2) cycles of immersion as described below.

Sample Number
JC08250002
JC08250012
JC08250035
JC08250037

2.2.2

The cold bath temperature was +25 (+10/-5) °C. The cold bath was tap water saturated with sodium chloride.

2.2.3

The hot bath temperature was +65 (+5/-0) °C. The hot bath was fresh tap water.

2.2.4

Sample number JC08250002 was immersed in the hot water bath for a period of fifteen (15) minutes.

2.2.5

The test sample was removed from the hot bath and immersed in the cold bath for a period of fifteen (15) minutes.

2.2.6

Paragraph 2.2.4 and 2.2.5 were repeated one (1) additional time for a total of two (2) cycles.

2.2.7

Sample number JC08250002 was visually examined. There was no visible or functional damage noted.

2.2.8

Sample number JC08250012 was immersed in the hot water bath for a period of fifteen (15) minutes.

2.2.9

The test sample was removed from the hot bath and immersed in the cold bath for a period of fifteen (15) minutes.

2.2.10

Paragraph 2.2.8 and 2.2.9 were repeated one (1) additional time for a total of two (2) cycles.

2.2.11

Sample number JC08250012 was visually examined. There was no visible or functional damage noted.

2.2.12

Sample number JC08250035 was immersed in the hot water bath for a period of fifteen (15) minutes.

2.2.13

The test sample was removed from the hot bath and immersed in the cold bath for a period of fifteen (15) minutes.

2.2.14

Paragraph 2.2.12 and 2.2.13 were repeated one (1) additional time for a total of two (2) cycles.

2.2.15

Sample number JC08250035 was visually examined. There was no visible or functional damage noted.

2.2.16

Sample number JC08250037 was immersed in the hot water bath for a period of fifteen (15) minutes.

2.2.17

The test sample was removed from the hot bath and immersed in the cold bath for a period of fifteen (15) minutes.

2.2.18

Paragraph 2.2.16 and 2.2.17 were repeated one (1) additional time for a total of two (2) cycles.

2.2.19

Sample number JC08250037 was visually examined. There was no visible or functional damage noted.

2.3 <u>RESULTS</u>

2.3.1

The immersion test was performed at the facility of Environment Associates, Inc., Santa Ana, California on February 27, 2006.

2.3.2

All inspection and operation of the test samples were by Environment Associates personnel at the direction of Carmanah Technologies personnel.

2.3.3

The test log may be found in Appendix I. The list of equipment used during the test and test photographs may be found in Appendix II.

A P P E N D I X I

TEST DATA

2.0 IMMERSION

The total number of pages in this subsection is 2

APPENDIX II

TEST EQUIPMENT LISTS

ΑΝΟ

TYPICAL TEST SETUP PHOTOS

The total number of pages in this Appendix is 3